IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (previously presented), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1.   (previously presented) A apparatus comprising:

a start processing unit which conduct a start processing, and then start an application when power of a apparatus system is turned on;

a trouble monitoring unit which control the power of the apparatus system, and integrally monitor a trouble of said start processing unit and a trouble during system operation; and

a trouble notification unit which acquire log information stored in said start processing unit, and notify an external remote maintenance system of the log information through a network interface if said trouble monitoring unit detects the trouble of said start processing unit.

2.   (original) A apparatus according to claim 1, wherein said start processing unit is provided on a baseboard, said trouble monitoring unit is provided on an integrated management panel board, and said trouble notification unit is provided on a system management support board, the system management support board comprising a dedicated power unit constantly supplied with power, a board interface connected to said integrated management panel board, and the network interface connecting said remote maintenance system.

3.   (original) A apparatus according to claim 2, wherein said system management support board is an interface board connected to an interface provided on the baseboard of the apparatus system.

4.   (previously presented) An apparatus, comprising:

a start processing unit which conduct a start processing, and then start an application when power of a apparatus system is turned on;

a trouble monitoring unit which control the power of the apparatus system, and integrally monitor a trouble of said start processing unit and a trouble during system operation; and

a trouble notification unit which acquire log information stored in said start processing

unit, and notify an external remote maintenance system of the log information through a network interface if said trouble monitoring unit detects a trouble of said start processing unit,

wherein said start processing unit is provided on a baseboard, said trouble monitoring unit is provided on an integrated management panel board, and said trouble notification unit is provided on a system management support board, the system management support board comprising a dedicated power unit constantly supplied with power, a board interface connected to said integrated management panel board, and the network interface connecting said remote maintenance system,

wherein said system management support board is an interface board connected to an interface provided on the baseboard of the apparatus system, and

wherein said system management support board is a PCI board connected to a PCI bus provided on the baseboard of the apparatus system.

5.   (previously presented) An apparatus, comprising:

a start processing unit which conduct a start processing, and then start an application when power of a apparatus system is turned on;

a trouble monitoring unit which control the power of the apparatus system, and integrally monitor a trouble of said start processing unit and a trouble during system operation; and

a trouble notification unit which acquire log information stored in said start processing unit, and notify an external remote maintenance system of the log information through a network interface if said trouble monitoring unit detects the a trouble of said start processing unit, and

wherein a monitoring agent which monitor the trouble of the trouble notification unit provided on said system management support board is provided on the apparatus system side as an application, and an interface coupled to said monitoring agent is provided on said system management support board.

6.   (original) A apparatus according to claim 5, wherein the interface coupled to said monitoring agent is a PCI bus.

7.   (original) A apparatus according to claim 5, wherein

said trouble notification unit on the system management support board stores a communication failure flag in a memory when notification of an alarm message and the log information to the remote maintenance system fails; and

if the apparatus system is restarted, said monitoring agent on the apparatus system side

notifies said remote maintenance system of the alarm message indicating that a communication trouble occurred to said trouble notification unit through the network interface on the baseboard based on said communication failure flag.

8.   (original) A apparatus according to claim 5, wherein

said trouble notification unit on the system management support board regularly communicates with said remote maintenance system using a network interface of the trouble notification unit, and stores a communication failure flag in a memory when detecting abnormality of communication; and

said monitoring agent on the server system side notifies said remote maintenance system of an alarm message indicating a communication trouble on said trouble notification unit side through the network interface on the baseboard based on said communication failure flag.

9.   (original) A apparatus according to claim 5, wherein

said monitoring agent on the communication system side regularly issues a regular notification command indicating that the apparatus system side normally operates; and

said trouble notification unit on the system management support board detects that the apparatus system is abnormal if said regular notification command is stopped, and notifies the remote maintenance system of an alarm message.

10.   (previously presented) A system management support apparatus, comprising:
a support board, comprising:

a power supply unit which constantly supply power;

a board interface which control power of a apparatus system, and connect to an integrated management panel board for monitoring a trouble of the apparatus system;

a network interface connecting an external remote maintenance system; and

a trouble notification unit which acquire log information when receiving trouble information generated since the power of the system is turned on until a start processing is conducted and an application is started, from said integrated management panel board, and notify the external remote maintenance system of the log information, and

wherein said power supply unit, said board interface, said network interface and said trouble notification unit are provided on the support board connectable to an interface of the apparatus system.

4

11.   (original) An apparatus according to claim 10, wherein said power supply unit, said board interface, said network interface and said trouble notification unit are provided on an interface board connected to an interface provided on a baseboard of the apparatus system.

12.   (original) An apparatus according to claim 10, wherein said power supply unit, said board interface, said network interface and said trouble notification unit are provided on a PCI board connected to a PCI bus provided on a baseboard of the apparatus system.

13.   (original) An apparatus according to claim 10, wherein an interface coupled to a monitoring agent provided on the apparatus system side as an application is provided.

14.   (original) An apparatus according to claim 13, wherein the interface coupled to said monitoring agent is a PCI bus.

15.   (original) An apparatus according to claim 14, wherein
said trouble notification unit stores a communication failure flag in a memory when notification of an alarm message and the log information to the remote maintenance system fails; and
if the apparatus system is restarted, said monitoring agent on the apparatus system side notifies said remote maintenance system of the alarm message indicating that a communication trouble occurred to said trouble notification unit through the network interface on the baseboard based on the communication failure flag.

16.   (original) An apparatus according to claim 14, wherein
said trouble notification unit regularly communicates with said remote maintenance system using a network interface of the trouble notification unit, and stores a communication failure flag in a memory when detecting abnormality of communication; and
said monitoring agent on the apparatus side notifies said remote maintenance system of an alarm message indicating abnormality of communication on said trouble notification unit side through the network interface on the baseboard based on said communication failure flag.

17.   (original) An apparatus according to claim 14, wherein said trouble notification unit detects that the apparatus system is abnormal if a regular notification command regularly issued from the monitoring agent on the apparatus system side is stopped, and notifies the

remote maintenance system of an alarm message.

18. (previously presented) A apparatus system management method, comprising:

a start processing operation of conducting a start processing, and then starting an application when power of a computer system is turned on;

a trouble monitoring operation of controlling the power of the computer system, and integrally monitoring a trouble of said start processing unit; and

a trouble notification operation of acquiring log information, and notifying an external remote maintenance system of the log information through a network interface if a trouble of said start processing unit is detected in said trouble monitoring operation occurring during a period from a turn-on of a system power supply, through activation, to a start-up of the application.

19. (previously presented) A apparatus system management method, comprising:

a start processing operation of conducting a start processing, and then starting an application when power of a computer system is turned on;

a trouble monitoring operation of controlling the power of the computer system, and integrally monitoring a trouble of said start processing unit; and

a trouble notification operation of acquiring log information, and notifying an external remote maintenance system of the log information through a network interface if the a trouble of said start processing unit is detected in said trouble monitoring operation, and

wherein a monitoring agent provided on the apparatus system side as an application monitors the trouble in said trouble notification operation.

20. (previously presented) A method according to claim 19, wherein

in said trouble notification operation, a communication failure flag is stored in a memory when notification of an alarm message and the log information to the remote maintenance system fails; and

if the apparatus system is restarted, said monitoring agent notifies said remote maintenance system of the alarm message indicating that a trouble occurred to said trouble notification operation through the network interface on the computer system side based on said communication failure flag.

21. (previously presented) A method according to claim 19, wherein

in said trouble notification operation, communication with said remote maintenance

system is regularly established using a network interface, and a communication failure flag is stored in a memory when abnormality of the communication is detected; and

said monitoring agent notifies said remote maintenance system of an alarm message indicating abnormality of the communication in said trouble notification operation through the network interface on the apparatus system side based on said communication failure flag.

22.   (original) A method according to claim 19, wherein

said monitoring agent regularly issues a regular notification command indicating that the apparatus system normally operates; and

in said trouble notification operation, abnormality of the apparatus system is detected if said regular notification command is stopped, and an alarm message is notified to the remote maintenance system.